

ABSTRACT OF THE DISCLOSURE

A semiconductor device has a structure in which a GaAs substrate and an InP substrate, different in lattice constant, are bonded to each other. An amorphous layer made of constituent atoms of the GaAs and InP substrates is formed at the interface between the GaAs and InP substrates. Forming the amorphous layer makes it possible to prevent a reduction of light-emitting efficiency caused by a thermal stress at the interface, even when a light-emitting layer by laser oscillation is formed near the interface. Besides, a linear current-voltage characteristic can be obtained at the interface.